## **BHEW Bulletin**

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## **E-Cigarettes**



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Behavioral Health

Epidemiology

Workgroup

- Electronic cigarettes (aka e-cigarettes or vaporizers) are battery-powered devices that provide doses of nicotine and other additives to the user in a water based mist.<sup>1</sup> The nicotine comes in a liquid format and may be synthetic.<sup>2</sup>
- E-cigarettes are not currently regulated by the FDA. However, they have conducted limited studies and found issues which indicate that quality control processes used to manufacture these products are poor or non-existent.<sup>3</sup>
  - Some cartridges labeled as "no nicotine" were found to contain nicotine while others showed the amounts of nicotine varied with each puff.<sup>3</sup>
  - o The FDA also found traces of toxic chemicals, including known cancercausing substances (carcinogens) in some cartridges.<sup>4</sup>
- Missouri does not currently have any laws regulating the sale of e-cigarettes.
   This means anyone, of any age, can purchase them.
- Nationally, the number of calls to poison centers involving e-cigarette liquids containing nicotine rose from 1 per month in September 2010 to 215 per month in February 2014. More than half (51.1%) involved children under 5.5
  - o Poisoning can occur via ingestion, inhalation or absorption through the skin.
  - o The liquid nicotine can be especially tempting to children as it comes in candy and fruit flavors.<sup>4</sup>
- Nationally, e-cigarette use doubled among U.S. middle and high school students from 2011 to 2012 (lifetime: 4.7% to 10.0%, 30 day: 1.5% to 2.8%).<sup>1</sup> Data from 2011 shows that approximately 6% of all adults have tried e-cigarettes.<sup>6</sup> More current, Missouri specific youth data will be available with the release of the Missouri Student Survey reports this fall.
- Finally, while often marketed as a smoking cessation device, one small study showed that smokers who also use e-cigarettes are no more likely to quit smoking after a year, compared with smokers who don't use the devices.

<sup>&</sup>lt;sup>1</sup> http://www.cdc.gov/media/releases/2013/p0905-ecigarette-use.html

<sup>&</sup>lt;sup>2</sup> http://www.ncsl.org/research/health/alternative-nicotine-products-e-cigarettes.aspx

<sup>&</sup>lt;sup>3</sup> http://www.fda.gov/forconsumers/consumerupdates/ucm225210.htm

<sup>4</sup> http://www.mayoclinic.org/healthy-living/quit-smoking/expert-answers/electronic-cigarettes/faq-20057776

<sup>&</sup>lt;sup>5</sup> http://www.cdc.gov/media/releases/2014/p0403-e-cigarette-poison.html

<sup>&</sup>lt;sup>6</sup> http://www.cdc.gov/media/releases/2013/p0228\_electronic\_cigarettes.html

<sup>&</sup>lt;sup>7</sup> http://www.reuters.com/article/2014/03/24/us-ecigarettes-idUSBREA2N1JT20140324